

AIR QUALITY PERMIT

Issued To: Northern Improvement Company
P.O. Box 2846
Fargo, ND 58108

Permit #3264-00
Application Complete: 06/09/03
Preliminary Determination Issued: 06/19/03
Department Decision Issued: 07/08/03
Permit Final: 07/24/03
AFS #777-3264

An air quality permit, with conditions, is hereby granted to Northern Improvement Company (Northern) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Permitted Equipment

Northern operates a portable drum mix asphalt plant and associated equipment. A list of permitted equipment is included in Section I.A of the Permit Analysis.

B. Plant Location

The initial location of the permitted facility is Section 30, Township 34 North, Range 48 East, in Daniels County, Montana. Northern operates the portable drum mix asphalt plant at various locations throughout Montana. Permit #3264-00 applies while operating at any location within Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

Section II: Conditions and Limitations

A. Emission Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic feet (gr/dscf) (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
2. Northern shall not cause or authorize to be discharged into the atmosphere from the asphalt plant, stack emissions that exhibit 20% opacity or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
3. Northern shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
4. Northern shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
5. Northern shall treat all unpaved portions of the haul roads, access roads, parking

lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.4. (ARM 17.8.749 and ARM 17.8.752).

6. A baghouse for air pollution control, with a device to measure the pressure drop (magnehelic gauge, manometer, etc.), must be installed and maintained. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained (ARM 17.8.749 and ARM 17.8.752).
7. Once a stack test is performed, the asphalt production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
8. Northern shall only use waste oil, diesel, or natural gas to fire the hot mix dryer (ARM 17.8.749).
9. Asphalt plant production shall not exceed 1,050,000 tons during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
10. The hours of operation of the diesel generator shall not exceed 3,500 hours during any rolling 12-month time period (ARM 17.8.1204).
11. The generator used with this facility shall not have a designated capacity greater than 1025-horsepower (hp) (765-kilowatt (kW)) (ARM 17.8.749).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Northern, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculation used to establish production levels shall be approved by the Department (ARM 17.8.749).
13. Northern shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 60, Subpart I, for the asphalt plant (ARM 17.8.340 and 40 CFR 60, Subpart I).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start up, an Environmental Protection Agency (EPA) Methods 1-5 source test shall be performed on the asphalt plant to demonstrate compliance with Section II.A.1. and an EPA Method 9 opacity test shall be performed in conjunction with all particulate tests to demonstrate compliance with the conditions specified in Sections II.A.2. and II.A.3. Testing shall continue on an every-four-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
2. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.C.4. (ARM 17.8.749).
3. Pressure drop on the control device and temperatures must be recorded during the compliance source test and reported as part of the test results (ARM 17.8.749).

4. Since asphalt production will be limited to the average production rate during the compliance source test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.749).
5. Northern may retest at any time in order to test at a higher production rate (ARM 17.8.749).
6. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
7. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this asphalt plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area where the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department upon request (ARM 17.8.765).

2. Northern shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Northern shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

This notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745 (1)(d) (ARM 17.8.745).

4. Northern shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop and temperature readings for the last 12 months. The records compiled in accordance with this permit shall be maintained by Northern as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

5. Northern shall document, by month, the asphalt production of the facility. By the 25th day of each month, Northern shall total the asphalt production of the facility during the previous 12 months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).
6. Northern shall document, by month, the hours of operation of the diesel generator. By the 25th day of each month, Northern shall total the hours of operation of the diesel generator during the previous 12 months to verify compliance with the limitation in Section II.A.10. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).

Section III: General Conditions

- A. Inspection - Northern shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Northern fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Northern of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Northern may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement - Construction must begin within 3 years of permit

issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Northern shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department approved permitting program.

PERMIT ANALYSIS
Northern Improvement Company
Permit #3264-00

I. Introduction/Process Description

A. Permitted Equipment

Northern Improvement Company (Northern) owns and operates a portable asphalt plant (maximum capacity 500-tons per hour (TPH)). Equipment used at the facility includes, but is not limited to the following:

1. (1) 1997 500-TPH Boeing drum mix asphalt plant with baghouse (fired on oil, diesel or natural gas)
2. (1) 6-gallon per hour (gal/hr) asphalt heater (fired on diesel)
3. (1) 765-kilowatt (kW) 1025-horsepower (hp) Cat Diesel Generator
4. Associated equipment (elevator, screens, bins, mixer, conveyors, etc.)

B. Source Description

For a typical operational set-up, stockpiled aggregate is loaded into the cold feeder. The aggregate is dispensed from the bins, and dumped onto slow moving feeder conveyors that transfer the aggregate to the drum mix dryer. The aggregate travels through the rotating drum where asphalt oil is added to the dryer. The dryer drum mixes the asphalt oil and the aggregate. The resulting hot-mix asphalt is loaded into a hot mix asphalt storage silo where it is stored until the asphalt is dumped into trucks for transport to the project site.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Northern shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Northern must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Northern shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.
 6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is an NSPS affected facility under 40 CFR Part 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), because the facility was constructed after June 11, 1973; therefore, the facility is subject to the requirements of 40 CFR Part 60, Subpart I.
- D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Northern submitted the appropriate permit application fee for the current permit action.
 2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.
- An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.
- E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter or use any asphalt plant, crusher or screen that has the potential to emit greater than 15 tons per year of any pollutant. Northern has the potential to emit (PTE) more than 15 tons per year of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), nitrogen oxides (NO_x), sulfur oxides (SO_x), carbon monoxide (CO), and volatile organic compounds (VOC); therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permit--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Northern submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Northern submitted an affidavit of publication of public notice for the May 22, 2003, issue of the *Daniels County Leader*, a newspaper of general circulation in the Towns of Scobey and Flaxville in Daniels County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Northern of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.
- This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).
- G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;

- b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3264-00 for Northern, the following conclusions were made.
- a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to a current NSPS (40 CFR Part 60, Subpart I).
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Northern will be a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or altered source. Northern shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized.

Northern proposed to control particulate emissions from the Boeing hot plant with a Delta Design baghouse. All visible emissions from the Boeing hot plant including systems for handling, storing, and weighing hot aggregate, systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt, and the loading, transfer, and storage systems associated with emission control systems are limited to 20% opacity. In addition, all asphalt particulate emissions are limited to 0.04 grains per dry standard cubic foot (gr/dscf). Further, Northern must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and the general plant area. Reasonable precautions include treating all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to meet the fugitive dust opacity requirements. The Department determined that using and properly maintaining a baghouse to maintain compliance with the limitations in Sections II.B.1., II.B.2., and II.B.3., and using water and/or chemical dust suppressant to comply with the reasonable precautions limitation will constitute BACT for the Northern asphalt plant.

Because of the relatively small amount of emissions produced by the diesel generator, add-on control would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no additional controls would constitute BACT for the portable generator.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Source	Ton/Year					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
1997 Boeing Drum Mix Asphalt Plant (500-ton/hr) with a Delta Design baghouse	14.87	7.44	28.88	16.80	68.25	30.45
Elevator, Screens, Bins, and Mixer	19.69	15.75				
Cold Aggregate Handling	26.25	21.00				
765-kW Cat Diesel Generator	3.95	3.95	55.65	4.51	11.99	3.68
6 gal/hr Asphalt Heater			0.35			0.25
Haul Roads	2.74	1.23				
Total	67.50	49.37	84.88	21.31	80.24	34.38

- A complete emission inventory for Permit #3264-00 is on file with the Department.

V. Existing Air Quality and Impacts

Permit #3264-00 is issued for the operation of a portable hot mix asphalt plant to be initially located in Section 30, Township 34 North, Range 48 East, in Daniels County, Montana. Permit #3264-00 will cover the plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minimal.

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined that there are no taking or damaging implications.

VII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air and Waste Management Bureau
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Helena, Montana 59620-0901
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FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Northern Improvement Company
P.O. Box 2846
Fargo, ND 58108

Air Quality Permit Number: 3264-00

Preliminary Determination Issued: 06/19/03

Department Decision Issued: 07/08/03

Permit Final: 07/24/03

1. Legal Description of Site: The asphalt plant would initially operate at Section 30, Township 34 North, Range 48 East, in Daniels County, Montana. However, Permit #3264-00 would also apply while operating at any location in Montana, except within those areas having a Department approved permitting program or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana.
2. Description of Project: The Department proposes to issue a permit for the operation of the following:
 - 1997 Boeing drum mix asphalt plant with a Delta Design baghouse (500 tons per hour (TPH))
 - (1) 6-gallon per hour (gal/hr) asphalt heater
 - Cat diesel generator (1025-horsepower (hp) (765-kilowatt (kW)))
 - Associated equipment
3. Objectives of Project: Northern, in an effort to increase business for the company, submitted a complete application for a drum mix asphalt plant. The issuance of Permit #3264-00 would allow Northern to operate the asphalt plant and associated equipment at various locations throughout Montana, including the initial site location.
4. Alternatives Considered: In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the Montana Air Quality permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because Northern has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT determination, would be included in Permit #3264-00.

6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.
7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources				X		Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic life and Habitats

Emissions from the addition of the proposed asphalt plant and associated equipment would have only minor impacts upon the terrestrial and aquatic life and habitats in areas where the generator may operate. Although air pollutant deposition would occur in the areas where the asphalt plant and associated equipment operates, the size and temporary nature of the operation, dispersion characteristics of pollutants, and conditions placed in Permit #3264-00 would result in minor impacts. In addition, the asphalt plant and associated equipment would be relatively small and located at previously disturbed sites. Therefore, the operation of the asphalt plant and associated equipment would present only minor impacts to the terrestrial and aquatic life and habitats in areas of potential operation.

B. Water Quality, Quantity and Distribution

Although there would be an increase in air emissions in the area where the asphalt plant and associated equipment operations commence, there would only be minor impacts on the water quality, quantity, and distribution because of the relatively small size and temporary nature of the operation. While deposition of pollutants would occur, the Department determined that any impacts from deposition of pollutants would be minor. As described in 7.F. of the EA, due to the conditions placed in Permit #3264-00 and the size a nature of the facility, the maximum impacts from the air emissions from this facility would be minor. Therefore, the asphalt plant and associated equipment would have only minor impacts to water quality, quantity, and distribution in the proposed area

of operation. Any accidental spills or leaks from equipment would be required to be handled according to the appropriate environmental regulations.

C. Geology and Soil Quality, Stability and Moisture

As a result of the asphalt plant and associated equipment, there would be minor impacts to the geology and soil quality, stability, and moisture near the equipment's operational area because of the increased vehicle traffic and deposition of pollutants from asphalt plant and associated equipment operations. As explained in Section 7.F. of this EA, the facility's size, operational requirements, temporary nature of the operation, and conditions placed in Permit #3264-00 would minimize the impacts from deposition. In addition, the asphalt plant and associated equipment would be relatively small in size and located at previously disturbed sites, which would also reduce the potential impact to the local geology and soil quality, stability, and moisture.

D. Vegetation Cover, Quantity, and Quality

Because small amounts of vegetation would likely be disturbed during the setup of the asphalt plant and associated equipment and small amounts of pollutant deposition would occur on the surrounding vegetation, there would be minor impacts on the local vegetative cover, quantity, and quality. The asphalt plant would also be relatively small in size and located at previously disturbed sites. As explained in Section 7.F. of this EA, the Department determined that, as a result of the size and temporary nature of the operation and conditions placed in Permit #3264-00, any impacts on vegetative cover, quantity, and quality from the deposition of pollutants would be minor.

E. Aesthetics

The asphalt plant and associated equipment would be visible and may create some additional noise in the area of operation. However, Permit #3264-00 would include conditions to control emissions, including visible emissions, from the asphalt plant and associated equipment. The asphalt plant and associated equipment would be relatively small and temporary. Therefore, any aesthetic impact to a given area would be minor and temporary.

F. Air Quality

Air quality impacts from the asphalt plant and associated equipment would be minor because the asphalt plant and associated equipment would be a relatively small and temporary source. Deposition of pollutants would occur as a result of operating the asphalt plant and associated equipment. However, the Department determined that any air quality impacts from deposition would be minor due to dispersion characteristics of pollutants, the atmosphere (wind speed, direction, temperature, etc.), the source (stack height, stack temperature, etc.), and conditions placed in Permit #3264-00. Permit #3264-00 would include conditions limiting the particulate matter and opacity from the plant. In addition, Permit #3264-00 would include conditions requiring that reasonable precautions be taken to control emissions from haul roads, access roads, parking lots, and the general work area. Further, Permit #3264-00 would also limit total emissions from the crushing/screening facility and any additional Northern equipment operated at the same site to 250 tons per year or less excluding fugitive emissions.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts, contacted the Montana

Natural Heritage Program (MNHP) to identify any species of special concern associated with the proposed site location. Search results indicated that there are no such environmental resources in the area. Area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. The initial location has been identified by Northern as Section 30, Township 34 North, Range 48 East, in Daniels County, Montana. The proposed project would have no impact on any unique endangered, fragile, or limited environmental resources because there are no such resources in the area.

H. Demands on Environmental Resource of Water, Air, and Energy

The addition of the asphalt plant and associated equipment would require only small demands on water, air, and energy as a result of the relatively small size and temporary nature of the facility. While small amounts of water would be used for dust control on the surrounding roadways and job site, no water would be needed to operate the generator.

Furthermore, as described in Section 7.F. of this EA, pollutant emissions generated from the facility would have minimal impacts on air quality in the immediate and surrounding area. Energy would be generated from the use of a generator, so no other sources of power would be necessary to operate the facility. The generator and asphalt heater would consume diesel fuel, a non-renewable resource. The asphalt plant would consume waste oil, a non-renewable resource. Overall, the equipment is relatively small and would have operational restrictions placed in Permit #3264-00. Because the facility operations would be seasonal and temporary, demands and impacts to the environmental resource of air and energy would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. According to the response from SHPO, there are no previously recorded historical or archeological sites within the designated search locale. Additionally, the asphalt plant and associated equipment would be located within a previously disturbed industrial site typically used for portable asphalt operations. According to past correspondence from the Montana State Historic Preservation Office, there is low likelihood of adverse disturbance to any archaeological or historic site, given previous industrial disturbance within an area. Therefore, the operation of the asphalt plant and associated equipment would not impact on any known historical or archeological sites.

J. Cumulative and Secondary Impacts

The asphalt plant and associated equipment would cause minor impacts on the physical and biological environment because the asphalt plant and associated equipment would result in emissions of particulate matter (PM), (PM₁₀), nitrogen oxides (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), and sulfur oxides (SO_x). Conditions that would be placed in Permit #3264-00 would ensure that no air quality impacts, other than minor air quality impacts, would occur. Limitations would be established in Permit #3264-00 to minimize air pollution. Noise would also be generated from the sites, but would cause minimal disturbance because the area of operation is sparsely populated and because other noise sources would be located in the area. There is potential for other operations to locate at these sites. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at the proposed

sites. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #3264-00.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services				X		Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals				X		Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The operation of the asphalt plant and associated equipment would not alter or disrupt any local lifestyles or communities (social structures or mores) in the area of operation because the asphalt plant and associated equipment would be relatively small, would operate intermittently, and would be used at a previously disturbed site. Therefore, the existing social structures and mores would not be affected as a result of this permit action.

B. Cultural Uniqueness and Diversity

In the view of the Department, it would be unlikely that the asphalt plant and associated equipment would have any impact on the cultural uniqueness and diversity of the proposed area of operation because the asphalt plant and associated equipment operations would be temporary and would take place in a previously disturbed industrial area.

C. Local and State Tax Base and Tax Revenue

The proposed asphalt plant and associated equipment would have little or no impact on the local and state tax base and tax revenue. The facility would be a temporary and seasonal source and would not remain at a site for an extended period of time. No full time or permanent employees would be added as a result of issuing Permit #3264-00. Furthermore, any revenue created through the use of the asphalt plant and associated equipment would be for a relatively short time period.

D. Agricultural or Industrial Production

The portable generator would be used at previously disturbed industrial areas; therefore, the Department does not expect that the permitted operation would impact or displace agricultural production. Furthermore, only minor impacts on any local industrial production would be expected because the operation of the facility would be temporary and would be relatively small in size.

E. Human Health

Permit #3264-00 would incorporate conditions to ensure that the asphalt plant and associated equipment would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F. of this EA, the air emissions from this asphalt plant and associated equipment would be minimized opacity limitations established in Permit #3264-00. Therefore, any associated impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

This facility would be located on previously disturbed property and would not impact access to recreational and wilderness activities. However, minor impact on the quality of recreational activities might be created by the noise from the asphalt plant and associated equipment. Emissions from this asphalt plant and associated equipment would be minimized as a result of limitations placed in Permit #3264-00 and the temporary and portable nature of the operation.

G. Quantity and Distribution of Employment

As a result of the relatively small size and temporary nature of the operation, the quantity and distribution of employment in the area would not be impacted. No full time, permanent employees would be employed as a result of issuing Permit #3264-00 for the asphalt plant and associated equipment.

H. Distribution of Population

Given the relatively small size and portable nature of the operation and the surrounding land usage, the normal population distribution in the area would not be affected.

I. Demands for Government Services

Although minor increases would be observed in the local traffic on existing roads in the area where the facility operates, the asphalt plant and associated equipment would not result in a need for new, altered, or additional government services.

J. Industrial and Commercial Activity

The operation of the asphalt plant and associated equipment would represent only a minor increase in the industrial activity in any given area because of the small size and the portable and temporary nature of the facility; therefore, only minor additional

industrial or commercial activity would result from the asphalt plant and associated equipment.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would be affected by issuing this permit. The applicable state and federal standards would protect the environment surrounding the site.

L. Cumulative and Secondary Impacts

The asphalt plant and associated equipment would cause only minor cumulative and secondary impacts to the social and economic aspects of the human environment because of the potential air emissions from asphalt plant and associated equipment and increase in local traffic in the immediate area. Further, because the asphalt production facility is relatively small and operates temporarily, only minor social and economic impacts to the local economy could be expected from the operation of the facility. New businesses would not be drawn to any areas and permanent jobs would not be created or lost as result of the proposed project. Because no new employees would be hired, there would be no economic impacts from new employees. Thus, the addition of the asphalt plant and associated equipment would result in only minor cumulative and secondary impacts to the social and economic environment.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from the proposed project are minor; therefore, an EIS is not required. Since the operation of the asphalt plant and associated equipment would be seasonal and temporary and operate according to the limitations and conditions in Permit #3264-00, no significant impacts would be expected from this project. Permit #3264-00 includes conditions and limitations to safeguard any potential environmental threat created by the proposed project.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

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